

Claims

What is claimed is:

1. A device for testing integrated circuits comprising:
 - a) a base;
 - b) a socket body within said base for receiving an integrated circuit under test;
 - c) a lid assembly including:
 - i) a pressure plate within the lid assembly,
 - ii) a number of fixed bearing assemblies on the lid assembly,
 - iii) a cam plate having a plurality of circumferential inclined surfaces,
 - iv) a rotatable handle on the top of the lid assembly for rotating the inclined surfaces on the cam plate relative to the bearing assemblies, whereby the inclined surface of the cam plate rides on the bearing assemblies thereby causing the cam plate to displace and thereby causing the pressure plate to move the integrated circuit into the socket body;
 - d) a hinge connecting the base and the lid assembly; and
 - e) a locking mechanism for securing the base and lid assembly in a closed position.
2. The device of claim 1, wherein said circumferential inclined surfaces form a continuous circuit.

3. The device of claim 2, wherein said circumferential inclined surfaces terminate in grooves sized to thrust the bearing assemblies in a fixed position.
4. The device of claim 3, wherein grooves are evenly spaced along said continuous circuit.
5. The device of claim 1, further including a thrust bearing assembly between said pressure plate and said cam plate.
6. The device of claim 1, further including shim plates within said device such that said pressure plate is offset by a height of said shim plates.
7. The device of claim 1, further including stop pins positioned to restrict the rotation of the handle.
8. The test socket of claim 1, further including a sight groove on the base, said sight groove allowing one to view the integrated circuit within said test socket, said sight groove further allowing one to view said sockets internal components.
9. The test socket of claim 1, wherein said plurality of inclined surfaces include a means for allowing incremental lowering of said pressure plate.

10. A device for testing integrated circuits comprising:

- a base;
- a socket within said base for receiving a plurality of terminals from an integrated circuit;
- a lid;
- a hinge joining said lid to said base;
- a locking mechanism allowing locking of said lid to said base;
- a pressure plate retained within said lid;
- a rotating means for lowering said pressure plate from said lid to said socket when a test device is placed within said socket.

11. The device of claim 10, wherein said means for lowering said pressure plate includes a means for incrementally lowering said pressure plate.

12. The device of claim 10, wherein said pressure plate includes an open central area through which the integrated circuit may be viewed.

13. A device for testing integrated circuits comprising:

- a base;
- a socket within said base for contacting a plurality of terminals from an integrated circuit;
- a lid;
- a hinge joining said lid to said base;
- a locking mechanism allowing locking of said lid to said base;
- a pressure plate retained within said lid;

a rotating means that incrementally lowers said pressure plate from said lid to said socket when a test device is placed within said device;

a plurality of open channels positioned on said pressure plate to view the integrated circuit.

14. The device of claim 13, wherein said pressure plate includes an open central area through which said integrated circuit may be viewed.

15. The device of claim 13, wherein said rotating means includes a continuous circuit of inclined surfaces.

16. The device of claim 13, wherein said circumferential inclined surfaces terminate in grooves sized to thrust the bearing assemblies in a fixed position.

17. The device of claim 13, wherein grooves are evenly spaced along said continuous circuit.

18. The device of claim 13, further including a thrust bearing assembly between the pressure plate and the rotating means.

19. The device of claim 13, further including shim plates within said device such that said pressure plate is offset by a height of said shim plates.

20. The device of claim 13, further including stop pins positioned to restrict the rotation of the handle.